

WHAT IS CLAIMED IS:

1. A hot beverage machine, comprising:

a heating unit having a fresh water intake;

a fresh water line for supplying fresh water to the fresh water intake of the heating unit;

an on-off valve;

a residual fluid line coupled to the fresh water intake of the heating unit through the on-off valve for conducting fluids to a collection container; and

a device for letting off residual steam and residual water from the heating unit, comprising a heat-exchanging and heat-storing condenser having a residual line section coupled to the residual fluid line, a fresh water line section coupled into the fresh water line and a heat storing medium that is connected to the residual line section and to the fresh water line section for conducting heat between these line sections.

2. The machine according to claim1, wherein the heating unit has a discharge line coupled to the heating unit, and further comprising:

a fresh water pump arranged in the fresh water line for pumping fresh water through the fresh water line section of said device to the heating unit; and

a pressure control valve coupled into the discharge line of the heating unit, the pressure control valve being operative for opening with the operating pressure of the water pump and closing when the water pump is shut down, the on-off valve being opened when the pressure control valve is closed thereby causing residual steam and residual water to flow through the residual fluid line section of said device.

3. The machine according to claim 2, wherein the heat exchanging and heat storing condenser is dimensioned so that following several fresh water intakes, respectively interrupted by a steam expansion process, a thermal equilibrium of the heat-exchanging and heat-storing condenser adjusts, wherein the residual steam in the residual fluid line section is essentially condensed completely during each cooling.

4. The machine according to claim 1, wherein the residual fluid line branches off from the fresh water intake of the heating unit through the on-off valve.

5. The machine according to claim 2, wherein the on-off valve and the water-pump are switchable at the same time.

6. The machine according to claim 1, wherein the on-off valve comprises a magnetic valve.

7. The machine according to claim 1, wherein the heat-exchanging and heat-storing condenser comprises a block of heat-conducting and heat-storing material in which the residual fluid line section and the fresh water line section are arranged.

8. The machine according to claim 7, wherein block comprises aluminum and the fresh water line section comprises chromium steel pipe, integrally cast into the block.

9. The machine according to claim 7, wherein the residual fluid line section is contained in a plane and the block is divided into parts parallel along said plane so that the residual fluid line section is exposed in one of the two parts.

10. The machine according to claims 7, wherein the residual fluid line section and the fresh water line section extend in two parallel planes, arranged one above the other, in the condenser block.

11. The machine according to claim 1, wherein the residual fluid line section and the fresh water line section are arranged parallel in the form of meandering line sections inside the condenser block.

12. The device according to claim 1, wherein the heating unit comprises a flow-through heating unit.